MODIS TECHNICAL TEAM MEETING

April 6, 1995

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were David Herring, John Bauernschub, Wayne Esaias, Joann Harnden, Ed Masuoka, Bill Barnes, Bruce Guenther, Dick Weber, Steve Ungar, and Locke Stuart.

1.0 SCHEDULE OF EVENTS

April 11-13	EDC Land DAAC Advisory Panel
April 15	Quarterly Reports Due to Barbara Conboy
April 18-19	Science Software Integration and Test Workshop
April 28	Level 2 Software Integration Review
April 30 - May 1	CEOS Meeting -- Best Western Hotel, Lanham, MD
May 2	MODIS Calibration Working Group -- Greenbelt Marriott
May 3 - 5	MODIS Science Team Meeting -- Greenbelt Marriott

2.0 MINUTES OF THE MEETING

2.1 MODIS Project Reports

Weber reported that the MODIS Engineering Model (EM) is still being tested at ambient temperature in the vacuum chamber at SBRC. Next week SBRC will certify the cleanliness of the vacuum chamber. Weber stated that SBRC's MODIS vacuum chamber is a first class facility with quartz crystal monitors (QCMs). He told the Team that MODIS Project is sending a contamination specialist to SBRC next week to observe their cleanliness certification tests. Weber said that SBRC hopes to begin testing the EM in vacuum after mid-April.

Weber reported that the SBRC Quarterly Management Review went well.

2.1.1 MODIS' First Dichroic

Salomonson asked for a status report on SBRC's review of the first dichroic. Weber stated that SBRC has determined that the first dichroic is responsible for 80 to 90 percent of the scattered light problem in MODIS. Barnes added that SBRC has asked OCLI, the company that designed and built the first dichroic, to provide options for correcting the light scattering problem. SBRC is also considering options for implementing their own, in-house designed dichroic, with fewer layers. Additionally, SBRC is considering options for developing software to correct the scattered light problem. Barnes suggested that GSFC may want to contract with some image enhancement specialists to do a 90-day quick study to determine whether software fixes are possible and worthwhile, should hardware fixes prove to be not viable.

2.2 MCST Reports

Guenther announced that MCST has given its primary contractor, GSC, a requirement to deliver a theoretical basis for implementing a ghosting correction algorithm. The first delivery deadline--April 1--was met, however, the document describing the algorithm is still undergoing internal review. Guenther stated that the document is thorough and that the technique looks good. The algorithm was coded and run on a Silicon Graphics computer, which, he said, under certain circumstances could be run in real time. Guenther said he will distribute the GSC document to the MODIS Technical Team next week.

Guenther reported that MCST is concerned that their flight requirement definition is not mature. He said MCST is now working to eliminate any uncertainty regarding flight requirements so that the team can efficiently determine its needed manpower. MODIS Project is helping MCST in this exercise.

Guenther announced that MCST's Level-1 ATBD is finished and will be posted on the EOS Project Science's ATBD WWW listing by Monday, April 10.

2.3 SDST Reports

Masuoka reported on some of his discussions with the MODLAND Group at their meeting. He said that group is considering approaches for producing gridded Level 2 products, and calling them Level 3A products. Whereas earlier MODLAND was considering producing 9-day composite data products, they are now planning to bin data from each swath into the ISCCP grid, keeping all observations. Masuoka said he is working with MODLAND to develop software to meet their requirements for Level 3 processing utilities.

Esaias asked where image data taken over lakes will reside--in the MOCEAN bundle or MODLAND bundle? He asked who is processing lake data, and by what method?

2.3.1 MODIS Simulated Data

Masuoka reported that Al Fleig's and Steve Ungar's presentations on MODIS simulated data were well received by MODLAND. The Land Group is beginning to think about what simulated data they need not just for the Beta software delivery in January 1996, but also for Version 1 delivery in which the software must have greater science content. Masuoka stated that SDST will work with MODLAND to ensure that simulated data sets are delivered on milestones consistent with the milestones for the Beta software delivery.

2.4 Possible MODIS Contributions to BOREAS

Ungar reported that three MODLAND investigators are considering contributing funds toward some as yet unspecified portion of BOREAS. Ungar pointed out that about $100K is needed from MODIS to fly MAS in the BOREAS campaign.

Ungar announced that MODLAND will soon have its first geolocated MAS data for general distribution.

2.5 Ocean Discipline Group Reports

Esaias reported that he attended a meeting recently with Michael King, Mike Freilich, Dave Starr, Jim Butler, and Skip Reber on data quality. According to Esaias, Freilich is preparing an EOS Science Validation Approach.

Salomonson asked how Freilich interfaces with Starr. Esaias responded that Starr is reviewing each individual ATBD to understand each individual team member's validation approach for each product. Freilich's role is to involve the IDS Teams much more.

3.0 ACTION ITEMS

3.1 Action Items Carried Forward

1. *Dave Diner & Ed Masuoka:* MODIS and MISR need to settle on a protocol(s) to deal with Level 1 and Level 2 data sets to be passed between the two teams to produce joint products. Report at the next SWAMP Meeting.
2. *Guenther:* Report the modeled results of the 1,000K source for SBRC's integration and alignment collimator to the Technical Team. [These data are forthcoming.]
3. *Fleig and Ungar*: Interact with the group leaders to develop a MODIS data simulation plan for review at the next Science Team Meeting. [Work on this item is still in progress. Simulated data are now available via FTP, and a white paper is forthcoming from Fleig.]

3.2 Closed Action Items

1. *Weber*: Work with SBRC to obtain MODIS test data. [Some test data are now available; more are forthcoming from SBRC.]